The Standardization of Judicial Decisions by Artificial Intelligence: A Critique for the New Science of Law

Matheus Boniatti Feksa
Faculdade Metodista Centenário, Santa Maria/RS – Brazil
boniattimatheus@outlook.com
https://orcid.org/0000-0002-7659-797X

Bruno Mello Correa de Barros Beuron
Universidade Federal do Pampa – UNIPAMPA, Santana do Livramento/RS – Brazil
brunomellocbarros@gmail.com
https://orcid.org/0000-0003-3250-015X

ABSTRACT

The standardization of decisions by the informatics of law, aiming at an exact science would result in a science in which progress and transformations would not drive the emergence of new rights or the readjustment of those already established. The present article proposed to examine, by means of a doctrinal-critical analysis, the impacts of the advance of the new automated technique of law, especially considering the configurations of a legal Fordism. We sought to answer what is the possibility of implementing Artificial Intelligence in the civil jurisdictional process and what would be the possible consequences, with regard to the advancement of rights already established and the advent of new rights through jurisdictional provision. The hypothetical-deductive approach was chosen, with the purpose of analyzing the problematic regarding the failures of the Fordist legal science. The monographic and historical methods of procedure were used, together with the bibliographical research technique, for a better analysis of the theme and the basis of the critical-conclusive analysis. Finally, what can be deduced is the need for constant improvement and in-depth studies before the artificial machine, which is not even capable of understanding the basic principles of law as a guarantee of the citizen's humanity.

Keywords: artificial intelligence; legal fordism; software; standardization.

La estandarización de las decisiones judiciales hecha por inteligencia artificial: una crítica para la nueva ciencia del derecho

RESUMEN

La estandarización de las decisiones por parte de la informática del derecho, apuntando a una ciencia exacta, resultaría en una ciencia en la que el progreso y las transformaciones no impulsarían el surgimiento de nuevos derechos o el reajuste de los ya establecidos. El presente artículo se propuso examinar, mediante un análisis doctrinal-crítico, los impactos del avance de la nueva técnica automatizada del derecho, especialmente considerando las configuraciones de un fordismo jurídico. Se buscó responder cuál es la posibilidad de implementar la Inteligencia Artificial en el proceso jurisdiccional civil y cuáles serían las posibles consecuencias, en relación con el avance de los derechos ya establecidos y el advenimiento de nuevos derechos a través de la prestación jurisdiccional. Se ha optado por el enfoque hipotético-deductivo, con el fin de analizar la problemática relativa a los fracasos de la ciencia jurídica fordista. Se utilizaron los métodos de procedimiento monográfico e histórico, junto con la técnica de investigación bibliográfica, para un mejor análisis del tema y la base del análisis crítico-conclusivo. Finalmente, lo que se deduce es la necesidad de perfeccionamiento y profundización constante ante la máquina artificial, que ni siquiera es capaz de entender los principios básicos del derecho como garantía de la humanidad del ciudadano.

Palabras clave: inteligencia artificial; fordismo jurídico; software; estandarización.

A padronização das decisões judiciais feita pela inteligência artificial: uma crítica para a nova ciência do direito

RESUMO

A padronização das decisões por parte da informática do direito, visando uma ciência exata, resultaria em uma ciência em que o progresso e as transformações não impulsariam o aparecimento de novos direitos ou o reajuste dos já estabelecidos. O presente artigo se propôs examinar, através de uma análise doutrinal-crítico, os impactos do avanço da nova técnica automatizada do direito, especialmente considerando as configurações de um fordismo jurídico. Procurou-se responder qual é a possibilidade de aplicar a inteligência artificial no processo jurisdicional civil e quais seriam as possíveis consequências, em relação com o avanço dos direitos já estabelecidos e o aparecimento de novos direitos através da prestação jurisdicional. Foi escolhida como metodologia procedimento monográfico e histórico, junto com a técnica de investigação bibliográfica, para uma melhor análise do tema e análise da base crítico-conclusiva. Finalmente o que se deduz é a necessidade de aperfeiçoamento e ampliação constante face a máquina artificial, que nem sequer é capaz de entender os princípios básicos do direito como garantia da humanidade do cidadão.

Palavras-chave: inteligência artificial; fordismo jurídico; software; padronização.

Introduction

This article comes from academic research conducted to verify the possible problems of the mass production of court orders and sentences in the field of civil law. The document presented is not linked to any research group or even funded by any institution, being totally focused on academic research in civil and digital law in order to be able to, in a gradual way, go deeper into the problems that surround the technology-legislation binomial.

Centuries before the emergence of digital law or great ideals for the science of law, legal transformations resulting from social changes have already been the subject of philosophical studies[1].

Currently, social transformations are common and constants in any contemporary society, the thirst for new forms of access to justice and security is what moves the social being to use artificial chains —at this time, those of artificial intelligence— and studies so that the objective to be reached is the celerity in the conquest of new rights and the recycling of old ones.

The central point is not celerity, not even the incessant search for it, but the consequence that acceleration causes. Can the mass production of sentences in the civil environment progress with rights?

The great criticism of the use of artificial intelligence in Civil Procedure and the choice of this specific area is explained by the fact that, in the Civil Law system, the rights linked to personality, to daily civil life, come from a legal system of their own, in which articles establish the limits of use of the social life of all citizens: right to the use of the image, right to the name, to succession.

In addition, they establish social rights and regulations: marriage, family, obligations (such as contracts and interpersonal relationships).

Therefore, during all these years of judicial decisions that may be considered jurisprudence, the act of sentencing, in the pertinent cases, has managed, in an analogical way, to encompass new rights within the limits proposed by the already existing law.

The legal machine is not prepared to support accuracy in decisions in the most diverse areas, since the analogy of the legal apparatus is fundamental for the resolution of conflicts arising from these social changes.

Resulting from the technological evolution, by the development of the network computerization and by the digitalization of most of the working methods, the new law science, here directly related to the judicial standardization, can also be called legal Fordism or Juridical Fordism.

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[1]   According to Thomas Hobbes, (1974, p. 21): "*but as men, in order to obtain peace, and through this their own preservation, created an artificial man, which we call the* State, *so they also created artificial chains, called civil laws* [...]".

The so-called Juridical Fordism can be described as the mass production of judicial decisions. These decisions must be based on technological tools about which there is still no proof that there would be a correct assessment by the legislation in force, much less in providing a legal update, since the decision-making process, as well as the legislative process, is a procedure that lacks analogies.

The contrast resulting from the lack of a solid theoretical base matters for the understanding of the consequences of the future judicial massification before the legal system that, in parts, does not have a structure formed in a concrete way to receive the follow-up and adjustments of the digital revolutions, resulting in a possible offense to the conjuncture of positivized rights and future advent of new legal protections in normative texts.

The analysis made by many modern scholars suggests the reform of the types of decisions taken by the operators of the law, since it is difficult to find, among different understandings, exact decisions for the concrete case.

Sentences are understanding processes built by legal analysis, they cannot be considered a form of irreducible result, since every rule has an open texture for necessary analogies. Therefore, the implementation and use of artificial intelligence applied to the informatics of law will lead the science of law to a future without pretensions, especially regarding the norms and sentences being endowed with this analogical and interpretative character.

The adequacy of law to change is of total necessity since the digitalization of processes is already a reality. However, to march towards the standardization of decisions by the informatics of law, aiming at an exact science would result in a science which progress and transformations according to social/practical activity would not drive the emergence of new rights or the readjustment of those that have long since become obsolete such as: family law, which was enacted without considering the affective ties between the parties, the law of succession, in which the partner was not considered a subject of law in order to qualify for succession, etc.

In order to exhaust the topic objectively, the article will highlight the contours provided by new informational technologies applied to the judicial sphere, informing the reader in a pedagogical-constructive manner of how the evolutionary process of these technologies occurred until the emergence of Artificial Intelligence and the moment of its inclusion in the Judiciary.

Furthermore, we intend to analyze the evolution of the application of Artificial Intelligence by means of software endowed with data, whether automated, taken from the network or fed by humans, highlighting the possible consequences and effectiveness of the massification of decisions (the new judicial Fordism), with regard to the attainment

of rights that have already been established and of new rights by means of legislation arising from the civil decision-making process.

To this objective, the topic of this paper will be divided into three chapters: the first chapter will mature the idea of the technological evolution of informational apparatuses, until the moment of the appearance of Artificial Intelligence, its conceptualization, and what are its characteristics regarding its uses.

The second chapter will encompass some possibilities of insertion of Artificial Intelligence in the judiciary.

Finally, the third chapter goes even further into the judicial sphere and analyzes the possibility of including artificial intelligence as a tool to render civil sentences, relating the sentencing methods with the great discussion between Hart and Dworkin, always having a rescue of the evolution of artificial intelligence itself so that there is correlation during the development of the subject in order to guide the reader and forward the construction of the idea for conclusion.

During the development of the article, the discussion of the subject will be carried out by means of the hypothetical-deductive approach with the aim of explaining the possible problem regarding the flaws of the new legal science. Regarding the procedural method, the combination of the monographic method is used for the formulation of the theoretical basis, along with the historical method, which rescues the evolution of the information and communication technologies until the appearance of Artificial Intelligence, in order to raise aspects for a constructive criticism based on the possibility or not of the implementation of Artificial Intelligence as a tool to obtain civil procedural judgments, based on the structuring of the digital evolution and the new science of law.

Moreover, the research technique to be used will be the bibliographical one, in order to unveil the main concepts and approaches tackles the problematic within the proposed topic. Regarding the line of research, the work is inserted into the "new rights in the globalized society" line, since the study is based on Computer Law in order to perform a criticism of the problems of inequality regarding the threat of exclusion or suppression of rights.

1. High Modernity and Technological Development: Historical Background of New Technologies and the Emergence of Artificial Intelligence

The Human history runs through times of conflict and transformation. The continuous line of historical events during centuries-old milestones has become increasingly calloused due to major socio-revolutionary events, regardless of the date being addressed. The human being, as an evolving social being, needs to transform his environment

so that he or she can adapt it to its needs, which may be perpetuated in the same way or only in his or her own time. This is evolution.

Need to reposition the body, surpassing its biological and psychic limits in order to adapt it to an electronic/technological matrix, through the use of mechanical and electronic components connected to it and inserted in it (Sterlac, 1997, n.p).

It was from a period of profound change in the global sphere that the information age really began. The Second World War was responsible for the creation of the first computer, a central milestone in the revolution of technologies in the 20th century, being the beginning of network connectivity, however, it will be necessary to highlight that the technological revolution did not begin exactly at this moment, it was in 1947 that the first transistor (popularly known as CHIPS) was created, giving space in 1957 to the first integrated circuit transistors (which until today are part of the computer system, responsible for driving electrically the chips of the machine) and finally resulting, in 1971, in the first microprocessor created by INTEL technology, by engineer Ted Hoff, thus beginning the "revolution within the revolution" (Castells, 1999, p. 80).

"Of course, this network development capability only became possible thanks to the important advances in both telecommunications and computer networking technologies that occurred during the 1970s" (Castells, 1999, p. 81), leveraging informational exchange and creating the need for a worldwide network for high-speed information sharing.

With the advent of the Internet, this exchange was made possible. The Internet, whose purpose was only military communication ended up becoming popular in the civilian environment due its use for scientific research and sharing of results, becoming a means of fast communication between the information shared in the network and its users, since "later, digital technology allowed the packaging of all types of messages, including sound, image and data, created a network that was able to communicate its nodes without using control centers." (Castells, 1999, p. 82).

Information and Communication Technologies (ICT's) were responsible for the further development of the internet, since with technological development "new technologies emerged, which spread throughout the world as ways of spreading knowledge and facilitated communication between people, regardless of geographical distances" (Rodrigues, 2014, p. 3).

The post-digital revolution sociability has been transforming not only visual precepts but also fundamental moral principles, as already occurs with ideas that in the early 2000s, which in earlier times were the solution to the digital race, leveraged even more the market of digital innovations, which in a few years saw their plans losing strength or opening opportunities for a multitude of other informational geniuses.

This is what happened with the common belief that nanotechnology would be the great step into the future, marked by the Fourth Industrial Revolution, which

innovated the computer area and improved all information technologies so that they could acquire an intelligent character.

It is noteworthy that, according to Klaus Schwab (2016), the Fourth Industrial Revolution is not only limited to systems and machines that are capable of reasoning and interconnection. New discoveries are happening all the time in all areas covered by the science of information technology. The Fourth Industrial Revolution is the recognition that the whole area is susceptible to cyborgization, computerization of its physical environment, and through these changes is endowed with the capacity for constant innovation, as with genetic verification and various discoveries with nanotechnology.

Nevertheless, it is important to point out that it was not considered that before there was nanotechnology and, at the same time, as a consequence of nanotechnology, artificial intelligences and the massive production of informational standards would be the result of the simple development of ICTs themselves, mainly by the objectification of ease in intellectual production environment.

Personal relationships with machine and between machines (M2M) will be the great responsible for this aforementioned future. The human being will be retiring from the front line in the creation of prototypes, since the machine's mechanical intelligence and motor coordination will be much more effective for faster and faster production, in order to keep up with the speed of the digital revolution, which is still under construction, and which is already a reality in the judicial system of countless countries.

The consequence of the speed and technological evolution in several areas is the "Technological Paradigm" (Castells, 1999, p. 97), explained by the scrapping of information in a cyclical manner, constantly transforming everything that is part of the data network as it integrates ever larger pieces of information.

It is then understood that "the contemporary paradigm shift can be seen as a transfer from a technology based primarily on cheap energy inputs to one based predominantly on cheap information inputs" (Freeman, 1988, p. 207) arising from the constant advancement of facilities through the digital and informational medium.

It is thanks to the development of electronic parts in the mid-20th Century that the scrutiny in the science of Artificial Intelligence began "only in the 1950s, stimulated by the invention of modern computers. This inspired a flood of new ideas about how machines could do what only minds had done previously (…)" (Minsky, 1985, p. 19).

Artificial intelligence can be characterized as, according to Pierre de Latil, the development of a machine in which "man entrusts to it part of his creative power." (1959, p. 55).

It is worth pointing out that artificial intelligence is not necessarily the autonomy of the machine, or the humanoid capacity of the electronic device, A.I. depends on

machine learning, since feeding the machine with mathematical data and logical syntheses so that it reproduces actions in a constant and immutable way does not characterize the possibility of intelligent automation and reasoning process consistent with the human capacity, going to this meeting it is understood that "A.I. devices emulate the diverse capabilities of the human brain and present themselves as machines with intelligent behaviors that synthesize and automate intellectual tasks". (Borghetti Cantali, 2019, p. 10)

The conceptualization of Artificial Intelligence ends up flowing over the years which it is the object of study, it is justified by the fact that it has been under constant analysis for over 70 years. However, all concepts end up funneling the idea that the central goal of Artificial Intelligence, according to Professor Dr. Paulo Sá Elias (2017), is the possibility of any machine —computers, robotic humanoids and other devices or systems with integrated electronics, computing or other advanced technologies.

The universe of Artificial Intelligence just overflows with changing concepts as it goes along. For big names, A.I. can be divided into strong or weak, taking into account the "reasoning" ability that the machine holds, not initially, but during the course of performing the task for which it was programmed, is what Scott Hartley (2017) conceptualizes. For the author, Artificial Intelligence in the weak sense is limited to providing a single tool with the likelihood of rigorous and accurate answers, but still with borderline capability, while in the opposite direction, strong Artificial Intelligence manages to establish concrete boundaries with the ability to reason: "in the sense that if you are given the right programs, you can say they understand and they have other cognitive states. […] the programs constitute the explanations themselves." (Hartley, 2017, p. 417).

Today, artificial intelligence is a division of informational science that sets out to devise devices that are endowed with the human ability to think, solve problems, reach concrete decisions, and perceive similarities, in short, the ability to be intelligent, and within the vast branch of artificial intelligence, there are ways to configure the machine so that it identifies subjects and selects predictable aspects in order to regulate the progress of reasoning, being divided into "Analytics and Machine Learning." (Pinto, 2020, p. 47).

The term Analytics refers to the ability to analyze data from human configuration, while the machine learning can predict and generalize specific patterns from the human configuration or not, the A.I. machine can, by crossing data, standardize numerous situations (Pinto, 2020, p. 43-60). Machine Learning is one of the main pillars of artificial intelligence and its insertion into the judicial system, this is summarized in order to conceptualize it directly: it is the "system's ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation" (Kaplan & Haenlein, 2019, p. 17).

The practice called "data mining" has taken great importance when it comes to the analysis of legal texts in order to produce judicial patterns, because it is a discipline that encompasses numerous other diverse subjects in the field of knowledge, and is directly linked with the ability of machine learning, in addition to " pattern recognition, natural computing, data visualization, image and signal processing, spatial data analytics, artificial intelligence, among others." (De Castro, 2016, p. 7), tools used during the machine's performance to search for patterns.

The gradual implementation of the new technology still leaves gaps in the capabilities that can achieve and the way in which it will be deployed for the full use of a contributive capacity to legal science, especially in hermeneutics for the maintenance or formulation of new legislation, even if the tools used, physical or programmatic, lack improvements. It is in order to highlight the insertion of these new technologies and their functionalities that we will now discuss the informational novelties that have entered the routines of the judiciary.

2. The Application of Artificial Intelligence to Improve the Judiciary's Tasks: The Beginning of a New Era

Currently, the availability of a plurality of demands in front of civil courts, referring to the most varied rights is the antagonism concerning the legal machine due to the slowness of the judicial apparatus. The legal system is struggling to keep up with the changes related to new technologies in the science of law, however, what we have, for the most part, is a judging machine that is still idle for adaptation and that only integrates informational means in a disorderly manner in order to guarantee some result.

The informational technologies would be the beginning of the construction of a possible solution for the judiciary to adapt to the new technological means since these "basically concern the development of programs (software) that organize, store and manipulate the data and information in such a way that facilitates the understanding of these by an infinite universe of interested parties." (Rover, 1999, p. 283).

The Artificial intelligence that surrounds all new ICTs is constantly improving and has the ability to learn as it integrates data to its bank (Machine Learning), in order to facilitate more and more the daily routine of all its users, the technique is defined, closely related to the AI's, as the ability of the algorithm can be "built in such a way that it contains instructions that determine the way in which the algorithm itself 'learns' from experiences —just like a human being— and can [. …], perform the same tasks in such a way as to return more appropriate outputs" (Valentini, 2017, p. 57).

In this sense, Egmont Hiller (1973) states that computers have the option to remember and learn, meaning that the storage capacity of the information fed to the machine results in indications and experiences through its own programming. Machine learning is the modification of behavior resulting from information about the outside world that has been entered into the program's database. It, therefore, results

in the premise that "Machine Learning is a field of study that gives computers the ability to learn without being explicitly programmed" (Samuel, 1959, p. 210).

The application of these technologies is evidenced in numerous procedural acts of the judiciary, they "are aimed at the improvement of activities and can be applied to assist the casuistic reasoning related to the improvement of the argumentative, associative, and discretionary performance of judges" (Pinto, 2020, p. 47), additionally, there is the possibility of using technological tools in several procedural parts, since there is the use of these programs to perform multiple tasks during the procedural course and not only during but also before the beginning of the examination of the procedural dispute (Sartor & Branting, 1998, p. 110).[2]

Objectively, as explained in previous chapter, textual data mining has a deep connection with the law, even more so with regard to the possibility of standardization of any documentary form to be produced by the user of the judiciary, logically it stands out, by the knowledge of Deivid Augusto Werner (2019), that the premise that with the insertion of this technique may —data mining— reach features of writing as textual, alphabetical, or numerical elements that are inserted in the text to be analyzed so that the software is able to convey something to be used by the program to find textual patterns. "From a legal perspective, attributes of legal texts would be numbers of laws, of decrees, regulations, law acronyms, tax acronyms, Latin words, legal thesaurus, and so on" (Werner, 2019, p. 28).

The informatics of law regarding the use of Artificial Intelligence for textual analysis of processes in order to group the most recurrent topics of general repercussion has opened space for the possible use of the tool, albeit a distant possibility, to "offer opinions and point more accurate results for judicial processes" (Pinto, 2020, p. 48).

Artificial intelligence has no closed application in the science of law, and it is already applied in numerous procedural moments with the help of different programs with different ways of functioning: document analysis, document delivery, legal advisor support, case outcome prediction and public legal education (Chittenden, 2017, pp. 6-7).

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2   "As a reply to those challenges, AI & law has developed increasingly sophisticated models and techniques that address many of the concerns of the critics of earlier AI models, including case-based reasoning, formal dialectics, theory construction, neural networks, formal argumentation and negotiation, intelligent document assembly, and tools for supporting discretional decision-making. These achievements are useful and important for the judiciary, because they provide a deeper and clearer understanding of some aspects of judicial problem-solving, and an effective support to the judges and their collaborators. Judges, squeezed between tightened budgets and increasing demands for justice, are desperately trying to maintain the quality of their decision-making process while coping with time and resource limitations. Flexible AI tools for decision support may promote a sufficient degree of uniformity and efficiency in judicial practice, while supporting a rational exercise of judicial discretion (and so possibly help to prevent, for example, the draconian rigidity of compulsory sentencing guidelines). In the same way, AI may help to reconcile flexibility, efficiency and accuracy in complementary tasks, such as the drafting of various judicial documents. In conclusion, we believe that the judiciary is in the early stages of a transformation in which AI technology will make the judicial process faster, cheaper, and more predictable without compromising the integrity of judges' discretionary reasoning."

Thinking technology by means of independent software has already been applied in various types of activities concerning day-to-day legal life such as, respectively to the aforementioned: document analysis, document delivery, court analysis practices to assist in future decisions, review of similar cases to predict other new cases and facilitate the understanding of the application of the law for laymen who are going through low-complexity civil proceedings.

Legal Adviser Support (LAS) is the gateway for Artificial Intelligence to prove its value with respect to judicial decisions. LAS is a legal advisor that, besides providing the lawyer using it with a more convenient opinion according to the information given to it, also monitors all the court decisions that may have a bearing on the procedural practice of the case in which the lawyer is consulting it, as long as these are issued within the timeframe of the case.

The Legal Adviser Support program ends up encountering a barrier in its own database, ending up restricting and closing the possibilities of argumentative use of professionals who use an analogy to the legal apparatus, unlike technologies that are already being applied by the national judicial court, according to studies by Henrique Alves Pinto (2009).

This is why it is necessary to enter the world of technological software, which uses artificial intelligence to mass produce documents in the field of law, not only sentences but also the most diverse types of documents.

Dr. Luzia is responsible for producing procedural documents that help the Public Treasury in tax execution proceedings, "since the robot's processor is able to search in its database the information required by the magistrate in his interlocutory decisions, such as addresses, vehicles and real estate." (Santos, Pereira & Gandra, 2019, n.p), bordering on a miscellany of functions of the forms of application of artificial intelligence.

In mismatching a simple software for collaboration, Victor has gone beyond simple minute helpfulness. The software has been developed and is being nurtured so that its functionality is not curtailed by simply assisting in pleadings, but also in analysis.

The software called VICTOR:

> is in the phase of building its neural networks to learn from thousands of decisions already rendered in the STF regarding the application of various themes of general repercussion. The goal at this point is for it to be able to achieve high levels of accuracy –which is the measure of the machine's effectiveness– so that it can assist the clerks in their analyses. [...] VICTOR will not be limited to its initial objective. (Supremo Tribunal Federal, 2018)

VICTOR is also a software responsible for the separation of procedural demands based on the general repercussion in order to facilitate the work of judging the Supreme Court.

One can notice that, from a present perspective of functionality, these software do not play roles beyond mere procedural assistance, unlike the search for sentencing, which was the reason that made Case Outcome Prediction fail: The search for the standardization of judgments. The search for universalization of legal terms in the sentences of different cases to predict judgments of the next ones that would be analogous to the one analyzed in order to guide the lawyer in a certain argumentation that would lead to the granting of his requests before the concrete case did not show effectiveness. What happens is that the software did not find —out of 79% accuracy of the predictions made— similarities between legal terms, and it was concluded that "It found that rather than legal argument being predictive of case outcomes, the most reliable factors were non-legal elements: language used, topics covered and circumstances mentioned in the case text" (Elias, 2017, n.p).

It is shown that Artificial Intelligence is still a tool that needs adjustments so that it can achieve its main goal: the human ability to reason. Within this context, it becomes urgent and necessary to address Artificial Intelligence and its immediate application with respect to the civil jurisdictional decision-making process and its immediate consequences.

The treatment of the new possible perspectives with the application of Artificial Intelligence assisting and even trying to replace the magistrate in the judicial decision rescued the possible need for adequacy of theories that once were the basis for deep criticism of the way the operators of the law influenced the way of sentencing. Nowadays, theories that defend the position of the judge as a mere applier of the law, as Dowrkin (1997, n.p) states: without any discretionary power for him or her to rule on the grounds of the lawsuits or hard cases, no longer exist. From this perspective, and based on the reflections proposed by Hart and Dworkin, the next chapter will analyze how Artificial Intelligence have entered the judicial practice.

3.   From Congenerial Artificial Intelligence to Process Automation: a Look at the Civil Judicial Process

The technological development of the late twentieth century and the positivist ideals developed by well-known jurists such as Hans Kelsen, Bobbio, and Dworkin the principialist resulted in the understanding that legal argumentation in short steps tries to keep up with the news of computer innovations over time.

It is evident that the future premise of the judicial system of all countries need to speed up their civil process: Artificial Intelligence will be introduced to facilitate, speed up litigations, and spare judges from procedural overloads and judicial overloads. Nevertheless, the obscurity that surrounds the application of technological mechanisms endowed with intelligence obscures the answers sought regarding the speed and capacity of Artificial Intelligence not to hinder the formation of judgments so that they

perpetuate the application of the legal system in an efficient and appropriate manner to the concrete case.

It is due to the advancement of the entire way of thinking due to interconnectivity, globalization, and computerization that basic legal precepts must be analyzed without losing the theoretical basis that had previously formed the cradle of the sentencing system used until now, which is the theory of the unity of the just solution a direct consequence of this system[3].

The science of law today uses the theory of just solution to guide the way of mechanization of jurisprudence, that is, of sentences, however, it is in fact clear the moral impossibility of "that a person must accept a contradiction in its system of norms. For the normative system of each isolated individual, the postulate of the absence of contradictions holds" (Alexy, 2001, p. 310).

The normative contradictions arise from the core of the one who produces the legislation in the face of obedience in which the citizen is subjugated to the norm for the maintenance of the state order.

The clash between the legislator's discretion is a secular topic already discussed by Hart and Dworkin and, on this threshold, it will be more than necessary to understand and differentiate the ideas so that the conclusion may be in unison with the proposition of the problem of this article.

Hart imposes limits to the discretion of the legal rule by means of a language that would come from a social rule superior to that one and that would guide and limit, besides the legislation, the application of the rule in the legislator's choice, while Dworkin would prevail on the legislation itself to limit the discretion of the rule's applicator, since the legislature itself would restrict how far the possible choice of the rule's application would fall.

In simple words, even if the doctrinal views lead the reader to an ideological disagreement, both guide to the centralization of the limitation of the discretionary power that comes from the positivized rule. How can the legal operator consider only one correct answer linked to the fact, since every legal rule has "what has been called an open texture"? (Hart, 1994, p. 141).

According to Hart, and linked to Dworkin's understanding, it is easily proven that "it is not possible to perform, in a clear way, the subsumption of the fact to a legal rule previously established" (Cf. Dworkin, 1997, p. 146), going against the grain of the legal norm, and the future conjuncture of the Legal Fordism, since this, in order to supply the decision handed down by any magistrate would constantly need updates in the procedural support servers endowed with Artificial Intelligence so that there is not a scrapping of ethical, political and social issues that are constantly being reconfigured and cannot be standardized and stiffened.

What remains proven and clear in terms of doctrine, is that judicial Fordism itself, which is so highly esteemed through the use of Artificial Intelligence, adds to the collection of gaps that it will not be able to fill through analogism, currently used by countless other jurists already immersed in the routine of using discretion to better subjugate the norm in relation to the fact.

Even if the software does separate the congruent aspects of all the judgments, the jurisdiction should not be guided by generalizations, exactness, and found patterns.

This highlights that the science of law will not be able to provide just one correct answer for every type of case to more than one interpreter, an assumption must be established that "there is indeed a correct answer for each individual interpreter considered, that is, that the idea of absolute correctness is not valid for the whole of the linguistic-legal community, but is applicable in relation to each of its members" (Cella & Wojciechowski, 2014, p. 279).

Even if there is the possibility of the correct answer, the use of Artificial Intelligence software for such an exact conclusion would end up disentangling the legal character of the norm, since it would take away the sociability of the general rule that, according to Hart, creates the legal rule itself.

Legal norms cannot be reduced into simple coercive orders that are based on the threats imposed by the norm itself, for it to have legal force it must possess in a specific way certain "characteristics which, if present in a given norm, will be regarded as conclusive indication that it is a group norm, to be supported by the social pressure it exerts" (Hart, 2009, p. 122).

For Hart, the science of law is a cultural phenomenon constructed by language itself, because, from the linguistics of the norm, he intends to highlight the use of normative language as the pillar to understand the normativity of legislation, of lawmaking.

The English philosopher observes that legal linguistics does not provide precise guidance, indicating facts in an exact manner, which leaves something to be desired at the moment when they must encompass the social facts that incur a legal fact, "no matter what strategy is chosen for the transmission of behavioral patterns (whether precedent or legislation); at some point, these patterns will prove imprecise and their application will be called into question" (Streck & Motta, 2018, p. 61).

The doubt posed at the moment of application is what characterizes what Hart calls Open Texture, that according to Hart:

> means that there are, in fact, areas of behavior in which much must be decided by administrative or judicial authorities seeking to strike, depending on the circumstances, a balance between conflicting interests, the weight of which varies from case to case. (2009, p. 175)

The practical application in discussion is the inability of the software equipped with Artificial Intelligence to understand the legal limits imposed by the language itself, even if it is equipped with the ability to visualize linguistic patterns, since each case, each rule, has its texture and its linguistic particularity, since the legal rule applied in the concrete case, depends on the social rule that came from a customary habit inherent to that language that typifies the fact.

While for Hart the legislative rule finds the discretionary barrier in the very language that maintains it, Dworkin, in an egalitarian attempt to limit the choice at the time of application of the rule, finds foundation in the legislative production itself, taking into consideration the completeness of the law.

Dworkin's model reinforces the possibility of the Unity of Justice Theory, which shows that the judge is not a legislator, according to Calsamiglia:

> which means that the judiciary has the function of guaranteeing pre-established rights. [...] Dworkin's thesis is compatible with the postulate of the separation of powers, since the judge is subordinated to the law and the right. The judiciary is 'null and void' - as Montesquieu affirmed - because its function is to guarantee rights. [...] the correct response model rejects the theory of syllogism, but accepts its basic political principle: the judge does not and cannot have political power. The judge's function is to guarantee individual rights, not to indicate social goals. The judicial function is distinct from the legislative and executive functions[...] in hard cases judges do not base their decisions on social goals or political guidelines. Difficult cases are resolved on the basis of principles that underlie rights. (1997, p. 21)

It is through Dworkin's model that the judiciary finds the security of its judicial decisions in all areas where they are applied, after all, the legal system is no longer rigid and immutable. Numerous jurists already use the positivistic for adequacy in the concrete case, however, the solution is not by means of discretion, but by the Integrity of the Law at the moment of legislature.

Legal conventionalism and pragmatism do not evidence directly the decisional effectiveness of the concrete case, it is therefore essential to bring out law as integrity and positively hold that "legal practice should be interpreted as a policy of development and that legal statements are interpretive opinions that combine conventionalism and pragmatism" (Hommerding & Sousa Lira, 2012, p. 112.), although the standardization by the judge of the concrete case should be done according to the analysis of the case itself, aiming at the correct answer, it should also carry during the decision-making act the social-political morality and the principles that gave rise to the application of the legal provision.

It is clear that the mass production of sentences based on similar coherence will not meet the current need of the social conjuncture, because when we accept Dworkin's (2003, p. 265) principles, it is explained that:

> integrity in the provision of justice does not mean only consistency (in the strict sense), that is, that similar cases receive the same decision. On the contrary! Judicial delivery grounded in integrity uses a standard of consistency, not in the strict form, enabling the judge greater breadth and imagination to decide correctly in complex situations.

The jurisdictional activity discussed should have coercive power when bound to the concrete case. The use of software equipped with Artificial Intelligence could mean the opposite of legal coercion through the integrity of the law, after all, "judicial decisions need a justifying aspect" (Hommerding & Sousa Lira, 2012, p. 101) and this justifier cannot be found only in the raw legal text, since the decision-making practice is based "preponderantly on the binomial rules-principles" (Hommerding & Sousa Lira, 2012, p. 101).

The differentiation is urgent: legislative integrity should not be confused with discretion, but rather with discretion as a limiter of the latter. The integrity of the Law has as its scientific basis the legal hermeneutics of the knowledge of the legal principle that provides stability to a certain state regulation, taking into consideration, also, the political morality of the legal provision, now being able and incisively limiting the discretionary practice of the magistrate who may find among legislations numerous solutions within solutions so that it is not done by the personal will of the judge.

It is emphasized that the fact that legislative integrity limits and guides the discretionary decision-making process does not reject the importance of making the law, but reinforces the construction of the law based on legal principles and public policies present at the time of the construction of the legislative process, so that it can, and not only that, also observe the already concrete legal provisions in the same way.

It is evident that the simple activity of integrity in the jurisdictional sphere should lead to the maximization of the magistrate's action for the performance and application of public norms "as if it expressed and respected a coherent set of principles and, to that end, that it interpreted those norms in such a way as to discover implicit norms among and beneath the explicit norms" (Dworkin, 2003, p. 261).

Dworkin's theory is already perfected and applied in the national legal system, according to Art. 20 of The Law of Introduction to Brazilian's Law (LINDB): "In the administrative, controlling and judicial spheres, decisions shall not be based on abstract legal values without considering the practical consequences of the decision" (Decreto-lei no. 4.657, 1942).

It has been proven that, although both philosophers develop a specific idea as to the limits imposed on legal rules, the rule itself must serve as a basis for the fomentation of jurisdiction, that is, the act of rendering a judicial sentence must take into consideration the limits imposed by the legislation in which it was imposed by the social fact practiced by the agent, in a subjective or objective manner.

What must be concluded is that the act of jurisdiction, as well as that of legislation, must maintain its humanistic character so that it may encompass all parts of society that encompasses the computerized citizen, who increasingly maintains interpersonal relations and generates new forms of incidence from the factual world to the legal world.

Conclusions

After all the years of technological development, it is evident that the improvements and sophistication of ever-smaller parts, ever-more powerful machines, and programs that encompass ever-more information, are only a small part of humanity's power to transform. Cyborgization, the construction of cyberspaces that imitate the urban, and the fusion of the urban environment itself with the virtual environment are undeniable realities that are already evident in the daily life of contemporary society.

It is precisely from these changes that stem the need for transformation, not only of our society, in a physical way, but of its institutions that are the representation of all citizens, who follow the technological development in a cyclical and increasingly fast way.

It is customary to point out that the social functions of all members of society and the facts incident in increasingly liquid and fast-paced social relations must be taken into consideration at the moment in which possible litigation may be taking place.

This is the opportunity to change the institutions that foster and guide the application and positivization of rights, the opportunity to unite the legal with the informational and to facilitate the work of the judiciary. This change, which should be made in a concentrated and planned way, however, is represented by a judiciary power lost as to the ways of integrating Artificial Intelligence applied to law informatics, applying software for small tasks in a disorderly way without aiming at a concrete result.

The portrait of the future is certain: Artificial Intelligence will be dominating consumer and social relations, and will also be inserted in the judiciary, possibly being used to speed up the process through the decisional practice, in order to relieve the immense amount of process in judicial instances.

How could a machine, which thinks in an exact manner by means of calculations and algorithms, result in a sentence that has as its purpose the resolution of conflicts arising from social relations? The premise is unique: Artificial Intelligence can even acquire the capacity of human reasoning, but it will not be able to understand the complexity of human relations within an advanced and increasingly connected society. The machine finds the barrier to acting within its own power, represented here by the legal system.

The form of legislation that guides the magistrate's application is made in such a way that it can possibly reach the conflict that may or may not occur, in the same way that a social fact can be a generator of enough motives for the *de facto* legislator to legislate on the occurrence in order to avoid, punish, or even ensure rights that emerge from the hypothetical fact in question.

How would the practice of judicial standardization by means of artificial intelligence collaborate so that the legislator would still have this power to adjust its function by the incidence of the factual world in the world of law? The judicial Fordist practice would be leading the future of the judiciary to a stagnation of new rights through the attempt to exact answers in order to obtain a false procedural celerity, while these sentences should be tutored by the State in order to reinforce the omnipresence in what concerns the support of new rights or even the modification of those that have already suffered.

The direct and logical consequence of the application of this tool, in the way it has been explained, is the gradual cessation of prominent legislative novelties. The legal system will harden the norms and finally stop the formation of possible new rights, since all these modifications and legal constructions come from the numerous judicial decisions regarding the analogism of the magistrate so that the norm becomes a binding force for the resolution of conflicts in all civil areas. In summary, conflict A, which does not have a concrete legal resolution, can be resolved by the analogy of rule B, which will certainly, after countless repetitive incidences, result in a law based on this interpretation.

In order for there to be an effective implementation of this system of thinking technologies in an activity that needs to be humanistic and must maintain this characteristic, Artificial Intelligence applied to the science of law must be able to analyze, interpret, judge, and maintain the barriers imposed by the legislator itself. Therefore, the application of Hart and Dworkin's theories in the concrete application and effectiveness of the rule during the process of jurisdiction should be the guidance for the implementation of Artificial Intelligence software, since the decision-making process should contain the discretionary nature at the same time that it limits the analogies function of the judge. Concrete cases do not follow a specific rule of legal incidence since they are produced by the effects of the author's subjectivism, a value that the AI program cannot, through the techniques reported in this article, reach.

The great possibility is that the mechanics of computer science applied to the law, by following an exact nature of patterns and symbologies that limit the decision, leaves something to be desired as a possibility of opening for analogies that could continue to revise, adapt, and innovate the already positivized rights and whatever the legislative process is based on the jurisprudences coming from these decisions.

Finally, after all the explanation and doctrinal analysis, we conclude that, in fact, Artificial Intelligence and the programs endowed with these characteristics do not hold the necessary traits to be able to render any sentence that is in accordance with the humanistic premises of law, since all artificial intelligence systems work by mining data for the information they have already absorbed, therefore, they cannot even come close to the humankind required for there to be enough discretion to render a judgment that does not contain errors or, much less, encompass all the needs of those who have approached the judiciary to solve their social problems. The machine cannot understand the meaning of human principles, nor that judicial Fordism is the answer to procedural speed, since it ends up barring the advance of the traditional way of legislating, applying the law and removing its social-linguistic character.

Perhaps in the near future artificial intelligence will manage to be more humanized, or perhaps the science of law will be able to include rules with an exact character so that it will no longer be necessary to exhaust the rule in order to have an analogous incidence in disconnected cases.

But, until then, the science of law must continue to be human and aim to maintain the application of legislation with an eye on social fact, since the judiciary is the guarantee of socio-cultural growth through the judicialization of countless understandings of various national civil courts, which maintain, through procedural practices, the fundamental guarantees and legal principles that are so relevant to the reach of all citizens to the dignity and integrity of the human person.

Therefore, the implementation of artificial intelligence in the civil judicial process must be done in a gradual manner, so that the machine can only help the judge with the decisions.

It is said, then, that the independence of the court's decision regarding lawsuits that deal with fundamental civil rights should not be taken entirely by AI, leaving the act of sentencing at the mercy of the judge's analogical understanding within the limits set by the law to the law itself.

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